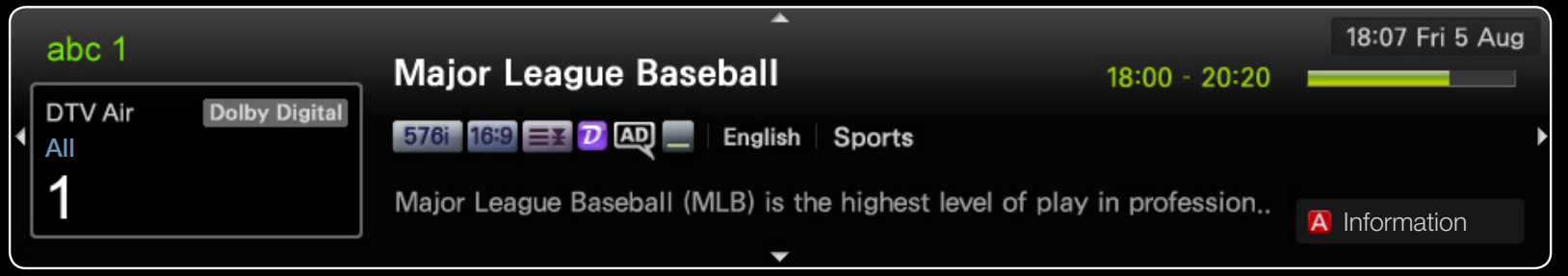
❑ Using the INFO button (Now & Next guide)

The display identifies the current channel and the status of certain audio-video settings.

The Now & Next guide shows daily TV programme information for each channel according to the broadcasting time.

- Scroll ◄, ► to view information for a desired programme while watching the current channel.
- Scroll ▲, ▼ to view information for other channels. If you want to move to the currently selected channel, press the **ENTER** ↵ button.



* It may differ depending on the model.

❑ Using Channel menu (Watch TV)

MENU → Support → Contents Home →ENTER

Press the **CONTENT** button to select **Watch TV**, then select the desired menu. Each screen will be displayed.

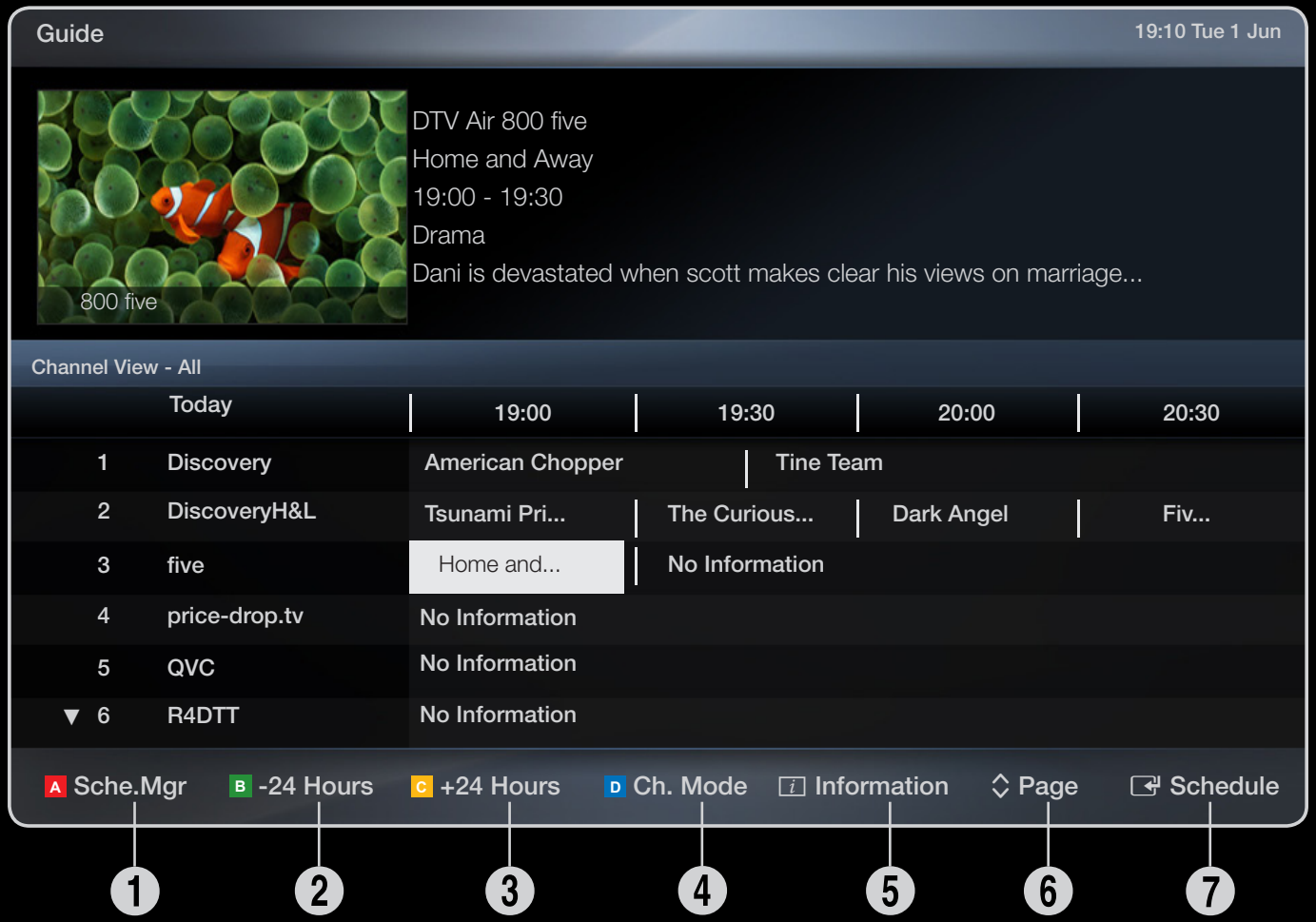
■ Guide (The option may differ depending on country)

The EPG (Electronic Programme Guide) information is provided by broadcasters. Using programme schedules provided by broadcasters, you can specify programmes you want to watch in advance so that the channel automatically changes to the selected programme channel at the specified time. Programme entries may appear blank or out of date depending on a channel status.



- In New Zealand, if Digital Text is set to Enable, the EPG (Electronic Programme Guide) will work.

Using Guide



* It may differ depending on the model.

1. A Red (**Sche.Mgr**): Moves to the reserved programmes in **Schedule Manager**.
2. B Green (**-24 Hour**): Viewing the list of programmes to be broadcasted before 24 hours.
3. C Yellow (**+24 Hours**): Viewing the list of programmes to be broadcasted after 24 hours.
4. D Blue (**Ch. Mode**): Select the type of channels you want to display on the **Channel List** window. (**All, TV, Radio, Data/Other, Favourites 1-5**)
5. [i] (**Information**): Displays details of the selected programme.
6. ◆ (**Page**): Move to previous or next page.
7. ↵ (**Watch / Schedule**)
   - When selecting the current programme, you can watch the selected programme.
   - When selecting the future programme, you can reserve to watch the selected programme. To cancel the schedule, press the **ENTER**↵ button again and select **Cancel Schedules**.

Schedule Manager

Cancel or set the **Timer Viewing** to display the channel you want at the intended time.

Using Timer Viewing

You can set a desired channel to be displayed automatically at the intended time. Set the current time first to use this function.

1. Press the **ENTER** button to add programme to schedule manually.
2. Press the ◄/►/▲/▼ button to set the **Antenna**, **Channel**, **Repeat**, **Date**, **Start Time**.
   - **Antenna**: **DTV** or **ATV** will be displayed depending on the Antenna setting.
   - **Channel**: Select the desired channel.

- **Repeat**: Select **Once**, **Manual**, **Sat~Sun**, **Mon~Fri** or **Everyday** to set at your convenience. If you select **Manual**, you can set the day you want.

  The (✓) mark indicates the day you've selected.

- **Date**: You can set the desired date.

  It is available when you select **Once** in **Repeat**.

- **Start Time**: You can the set the start time you want.

If you want to edit or cancel the schedule, select the reserved schedule on the **Schedule List**, and select the **Edit** or **Cancel Schedules**.

Channel List

You can view channel information, **All**, **TV**, **Radio**, **Data/Other**, **Analogue** or **Favourites 1-5**.



When you press the **CH LIST** button on the remote control, **Channel List** screen will be displayed at once.

- **All**: Shows all currently available channels.
- **TV**: Shows all currently available TV channels.
- **Radio**: Shows all currently radio channels.
- **Data/Other**: Shows all currently available MHP or other channels.
- **Analogue**: Shows all currently available analogue channels.
- **Favourites 1-5**: Shows all favourite channels.

Favourites 1-5 will be displayed when you set Add to Favourites.

If you want to view favourite channels you added, press the CH LIST button and use ◀▶ (Ch.Mode) button to move Favourites 1-5.

Using the remote control buttons with the Channel List.

- C Yellow (Programme View / Channel View): Displays the programme when digital channel is selected. Returns to the channel view.
- ◀▶ (Ch.Mode / Channel): Move to the All, TV, Radio, Data/Other or Favourites 1-5 / Change channels.

  When you press the C (Programme View) button, you can move to other channels using ◀▶ (Channel) button.

- (**Watch / Information**): Watches the channel you select. / Displays details of the selected programme.
- (**Page**): Move to next or previous page.

Channel Status Display Icons

Icon	Operations
A	An analogue channel.
	A reserved programme.
	A locked channel.

How to use Timer Viewing in Channel List (digital channels only)

When you set the **Timer Viewing** in **Channel List**, you can only set the programme in **Programme View**.

1. Press the **CH LIST** button, then select a desired digital channel.
2. Press the C (**Programme View**) button.
3. Press the ▲ / ▼ buttons to select the desired programme, then press the **ENTER** (**Information**) or **INFO** button.
4. Select **Timer Viewing**, then press the **ENTER** button when done.

If you want to cancel **Timer Viewing**, follow steps 1 through 3. Select **Cancel Schedules**.

Channel Manager

You can edit the channel to your preference.

- ( ) **Channels**: Shows the channel list according to the channel type.
- ( ) **Favourites 1-5**: Shows favourite channels.

Using the colour buttons with the **Channel Manager**.

- D Blue (**Sorting**): Changes the list ordered by channel number or channel name.



* It may differ depending on the model.

Channel Status Display Icons

Icon	Operations
A	An analogue channel.
✓	A channel selected.
★	A channel set as a favourite.
🔒	A locked channel.
	Displays the **Channel Manager** option menu.

Channel Manager Option Menu TOOLS

Set each channel using the **Channel Manager** menu options (**Watch**, **Add to Favourites/Edit Favourites, Lock/Unlock, Edit Channel Name, Edit Channel Number, Delete, Select All/Deselect All**). Option menu items may differ depending on the channel status.

1. Select a channel and press the **TOOLS** button.
2. Select a function and change its settings.

- **Watch**: Watch the selected channel.
- **Add to Favourites/Edit Favourites**: Set channels you watch frequently as favourites. / Add or Delete the selected channel in **Favourites 1-5**.

  1. Select the **Add to Favourites/Edit Favourites**, then press the **ENTER** button. Add or Delete the selected channel in **Favourites 1-5**.

     If the channel is already added to favourite channel, **Edit Favourites** will be shown.

  2. Press the **ENTER** button to select **Favourites 1-5**, then press the **OK** button.

     One favourite channel can be added in several of **Favourites** among **Favourites 1-5**.

- **Lock/Unlock**: Lock a channel so that the channel cannot be selected and viewed.

  NOTE

  - This function is available only when the **Channel Lock** is set to **On**.
  - The PIN input screen appears. Enter your 4-digit PIN, the default of which is “0-0-0-0”. Change the PIN using the **Change PIN** option.

- **Edit Channel Name** (analogue channels only): Assign your own channel name.
- **Edit Channel Number**: Edit the number by pressing the number buttons desired.

  Some area may not be able to support **Edit Channel Name** and **Edit Channel Number** function.

- **Delete**: You can delete a channel to display the channels you want.
- **Deselect All**: Deselect all the selected channels.

  You can only select **Deselect All** when one or more channels are selected.
- **Select All**: Select all the channels in the channel list

❑ Retuning Channels

MENU → Channel → ENTER

■ Country (Australia / New Zealand / Singapore)

Select your country so that the TV can correctly auto-tune the broadcasting channels.

The PIN input screen appears. Enter your 4 digit PIN number. The default PIN number is “0-0-0-0.”

Auto Tuning

(depending on the country)

Scans for a channel automatically and stores in the TV.

Automatically allocated programme numbers may not correspond to actual or desired programme numbers. If a channel is locked, the PIN input window appears.

- **Digital & Analogue / Digital / Analogue** : Select the channel source to memorise.

Manual Tuning

Scans for a channel manually and stores in the TV.

If a channel is locked, the PIN input window appears.

According to the channel source, **Manual Tuning** may be supported.

- **Digital Channel Tuning** (**Channel**, **Frequency**, **Bandwidth**(depending on the country)): When scanning has finished, channels are updated in the channel list.
- **Analogue Channel Tuning** (**Programme, Colour System, Sound System, Channel, Search, Store**): Press the A (**New**) button. If there is abnormal sound or no sound, reselect the sound standard required.

Channel mode

- **C** (aerial channel mode) / **S** (cable channel mode): These two modes allow you to select a channel by entering the assigned number for each aerial broadcasting station or cable channel.

Edit Channel Number (Disable / Enable)

(New Zealand only)

When this option is enabled, you can edit channel number. But you cannot update channel information.

Fine Tune

(analogue channels only)

If the signal is weak or distorted, fine tune the channel manually.

- Fine tuned channels are marked with an asterisk “*”.
- To reset the fine-tuning, select **Reset**.

Transfer Channel List (depending on the country)

Imports or exports the channel map. You should connect a USB storage to use this function.

The PIN number input screen appears. Enter your 4 digit PIN number.

The default PIN number of a new TV set is '0-0-0-0'.

- **Import from USB**: Import channel list from USB.
- **Export to USB**: Export channel list to USB.

❑ Changing the Preset Picture Mode

MENU → Picture → Picture Mode → ENTER

■ Picture Mode TOOLS

Select your preferred picture type.

When connecting a PC, you can only make changes to the **Entertain** and **Standard**.

- **Dynamic**: Suitable for a bright room.
- **Standard**: Suitable for a normal environment.
- **Natural** for LCD and LED 5 series 32-40 inches: Suitable for reducing eye strain.
- **Movie**: Suitable for watching movies in a dark room.
- **Entertain**: Suitable for watching movies and games.

  It is only available when connecting a PC.

■ Samsung MagicAngle for LED 4 series 22 inches, 5 series 22 inches

MENU → Picture → Samsung MagicAngle → ENTER

Adjust screen viewing Angle to optimize screen quality according to your viewing position.

- **Samsung MagicAngle**: When viewing the screen at an angle from below or above by setting the appropriate mode for each position you can obtain a similar picture quality as viewing the screen directly from the front.

  Off: Select when viewing from the front position.

  Lean Back Mode: Select when viewing from a slightly lower position.

  Standing Mode: Select when viewing from the upper position.

- **Mode**: Adjust screen viewing angle.

When **Samsung MagicAngle** is set to **Lean Back Mode** or **Standing Mode**, **Gamma** is not available.

Backlight / Contrast / Brightness / Sharpness / Colour / Tint (G/R)

Your television has several setting options for picture quality control.

NOTE

- In analogue **TV** modes of the PAL system, the **Tint (G/R)** function is not available.
- When connecting a PC, you can only make changes to **Backlight**, **Contrast**, **Brightness** and **Sharpness**.
- Settings can be adjusted and stored for each external device connected to the TV.
- Lowering picture brightness reduces power consumption.

Screen Adjustment

MENU → Picture → Screen Adjustment → ENTER

Set the various picture options such as picture size and aspect ratio.

- **Picture Size**: Your cable box/satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.

  Auto Wide: Automatically adjusts the picture size to the **16:9** aspect ratio.

  16:9: Sets the picture to 16:9 wide mode.

  Wide Zoom: Magnifies the picture size more than 4:3.

  Adjusts the **Position** by using ▲, ▼ buttons.

  Zoom: Magnifies the 16:9 wide pictures vertically to fit the screen size.

  Adjusts the **Zoom** or **Position** by using ▲, ▼ button.

4:3: Sets the picture to basic (4:3) mode.

Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and centre of the screen may cause image retention (screen burn) which are not covered by the warranty.

Screen Fit: Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are input.

Smart View1 for LED 5 series 40 inches and LCD 5 series: Reduces original screen by 50%.

Smart View2 for LED 5 series 40 inches and LCD 5 series: Reduces original screen by 25%.

NOTE

- **Smart View1** is enabled only in HDMI mode.
- **Smart View2** is enabled only in DTV and HDMI modes.

- **Position**: Adjust the picture position. It is only available in **Wide Zoom**.
- **Zoom/Position** : Adjust the picture size and position. It is only available in **Zoom**.

NOTE

- After selecting **Screen Fit** in HDMI (1080i / 1080p) or Component (1080i/1080p) mode, you may need to centre the picture:
  1. Press the ▲ or ▼ button to select **Position**.
  2. Press the **ENTER** ↵ button.
  3. Press the ▲, ▼, ◀, ▶ button to move the picture.
- Depending on the input source, the picture size options may vary.
- If you want to reset the position you adjusted, select **Reset** in the **Position** screen. The picture will be set to its default position.

- The available items may differ depending on the selected mode.
- When connecting a PC, only **16:9** and **4:3** modes can be adjusted.
- Settings can be adjusted and stored for each external device connected to an input on the TV.
- If you use the **Screen Fit** function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function.

- **4:3 Screen Size (16:9 / Wide Zoom / Zoom / 4:3)** (New Zealand / Singapore only): Available only when picture size is set to **Auto Wide**. You can determine the desired picture size at the 4:3 WSS (Wide Screen Service) size or the original size. Each country requires different picture size.

❑ Changing the Picture Options

■ Advanced Settings

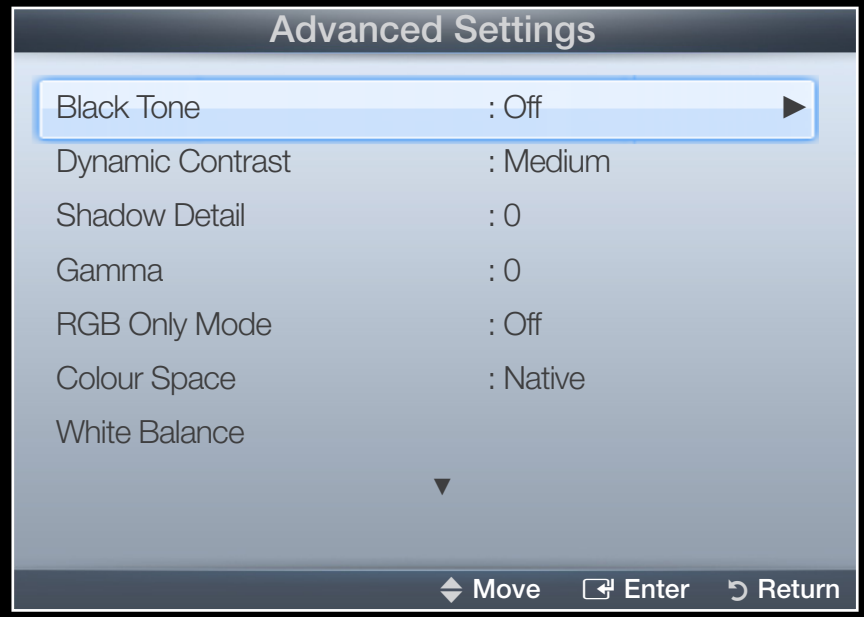
MENU → Picture → Advanced Settings → ENTER

(available in **Standard / Movie** mode)

You can adjust the detailed setting for the screen including colour and contrast.

When connecting a PC, you can only make changes to **Gamma** and **White Balance**.

- **Black Tone (Off / Dark / Darker / Darkest)**: Select the black level to adjust the screen depth.



- The displayed image may diifer depending on the model.

- **Dynamic Contrast (Off / Low / Medium / High)**: Adjust the screen contrast.
- **Shadow Detail**: Increase the brightness of dark images.
- **Gamma**: Adjust the primary colour intensity.
- **RGB Only Mode (Off / Red / Green / Blue)**: Displays the Red, Green and Blue colour for making fine adjustments to the hue and saturation.
- **Colour Space (Auto / Native)**: Adjust the range of colours available to create the image.

- **White Balance**: Adjust the colour temperature for a more natural picture.

  R-Offset / G-Offset / B-Offset: Adjust each colour's (red, green, blue) darkness.

  R-Gain / G-Gain / B-Gain: Adjust each colour's (red, green, blue) brightness.

  Reset: Resets the **White Balance** to its default settings.
- **Flesh Tone**: Emphasize pink "Flesh Tone."
- **Edge Enhancement (Off / On)**: Emphasize object boundaries.
- **Motion Lighting (Off / On)**: Reduce power consumption by brightness control adapted motion.

  When changing a setting value of **Backlight, Contrast, Brightness, Motion Lighting** will be set to **Off**.
- **LED Motion Plus (Off / On)** for LED 5 series 40 inches: Reduce power consumption by brightness control adapted motion.

Picture Options

MENU → Picture → Picture Options → ENTER

When connecting a PC, you can only make changes to the **Colour Tone**.

- **Colour Tone (Cool / Standard / Warm1 / Warm2)**

  Warm1 or **Warm2** will be deactivated when the picture mode is **Dynamic**.

  Settings can be adjusted and stored for each external device connected to an input on the TV.



- The displayed image may diifer depending on the model.

- **Digital Noise Filter (Off / Low / Medium / High / Auto / Auto Visualisation)**: If the broadcast signal received by your TV is weak, you can activate the **Digital Noise Filter** feature to reduce any static and ghosting that may appear on the screen.

  When the signal is weak, try other options until the best picture is displayed.

  Auto Visualisation: When changing analogue channels, displays signal strength.

  Only available for analogue channels.

  When the **INFO** button is pressed, the signal strength bar is displayed.

  When bar is green, you are receiving the best possible signal.

- **MPEG Noise Filter (Off / Low / Medium / High / Auto)**: Reduces MPEG noise to provide improved picture quality.

- **HDMI Black Level (Low / Normal)**: Selects the black level on the screen to adjust the screen depth.

  Available only in **HDMI** mode (RGB signals).

- **Film Mode (Off / Auto1 / Auto2)**: Sets the TV to automatically sense and process film signals from all sources and adjust the picture for optimum quality.

  Available in TV mode, AV, COMPONENT (1080i) and HDMI (1080i).

  If you do not feel comfortable viewing the screen, switch the **Film mode** to **Off**, **Auto1**, or **Auto2**.

Reset Picture (OK / Cancel)

Resets your current picture mode to its default settings.

❑ Changing the Preset Sound Mode

MENU → Sound → Sound Mode → ENTER

■ Sound Mode TOOLS

- **Standard**: Selects the normal sound mode.
- **Music**: Emphasizes music over voices.
- **Movie**: Provides the best sound for movies.
- **Clear Voice**: Emphasizes voices over other sounds.
- **Amplify**: Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

❑ Adjusting Sound Settings

MENU → Sound → ENTER

■ Sound Effect

(standard sound mode only)

Use the up and down arrow keys to select an option, and then press **ENTER**.

- **SRS TruSurround HD (Off / On)**

  This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.

- **SRS TruDialog (Off / On)**

  This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

- **Equalizer**

  Use Equalizer to customize sound setting for each speaker.

  Balance: Adjusts the balance between the right and left speaker.

  100Hz / 300Hz / 1kHz / 3kHz / 10kHz (Bandwidth Adjustment): Adjusts the level of specific bandwidth frequencies.

  Reset: Resets the equalizer to its default settings.

Broadcast Audio Options

- **Audio Language** TOOLS

  (digital channels only)

  Change the default value for audio languages.

  The available language may differ depending on the broadcast.

- **Audio Format**

  (digital channels only)

  Select the audio format.

- **Audio Description**

  (not available in all locations) (digital channels only)

  This function handles the Audio Stream for the AD (Audio Description) which is sent along with the Main audio from the broadcaster.

  - **Audio Description (Off / On)**: Turn the audio description function on or off.
  - **Volume**: Adjust the audio description volume.

Additional Setting

- **DTV Audio Level (MPEG / HE-AAC)**: (digital channels only) This function allows you to reduce the disparity of a voice signal (which is one of the signals received during a digital TV broadcast) to a desired level.

  - According to the type of broadcast signal, **MPEG / HE-AAC** can be adjusted between -10dB and 0dB.
  - To increase or decrease the volume, adjust between the range 0 and -10 respectively.

- **Dolby Digital Comp (Line / RF)**: This function minimizes signal disparity between a dolby digital signal and a voice signal (i.e. MPEG Audio, HE-AAC, ATV Sound).

  Select Line to obtain dynamic sound, and **RF** to reduce the difference between loud and soft sounds at night time.

  Line: Set the output level for signals greater or less than -31dB (reference) to either -20dB or -31dB.

  RF: Set the output level for signals greater or less than -20dB (reference) to either -10dB or -20dB.

Speaker Settings

- **Auto Volume (Off / Normal / Night)**

  To equalize the volume level on each channel, set to **Normal**.

  Night: This mode provides an improved sound experience compared to **Normal** mode, making almost no noise. It is useful at night.

  To use the volume control on the source device connected to the TV, set **Auto Volume** to **Off** on the TV. Otherwise, a change to the volume control of the source device may not be applied.

Reset Sound (OK / Cancel)

Resets your current sound mode to its default settings.

❑ Selecting the Sound Mode TOOLS

When you set to **Dual I-II**, the current sound mode is displayed on the screen.

	Audio Type	Dual I-II	Default
A2 Stereo	Mono	**Mono**	Automatic change
	Stereo	**Stereo ↔ Mono**	
	Dual	**Dual I ↔ Dual II**	**Dual I**
NICAM Stereo	Mono	**Mono**	Automatic change
	Stereo	**Mono ↔ Stereo**	
	Dual	**Mono → Dual I** **↖ Dual II ↙**	**Dual I**

- If the stereo signal is weak and an automatic switching, occurs, then switch to the mono.
- Only activated in stereo sound signal.
- Only available when the **Source** is set to **TV**.
- **Dual I-II** is only available when pressing **TOOLS** button(digital channels only).

❑ Setting the Time

MENU → System → Time → ENTER

■ Time

The current time will appear every time you press the **INFO** button.

- **Clock**: Setting the clock is for using various timer features of the TV.

  If you disconnect the power cord, you have to set the clock again.

  Clock Mode: Set up the current time manually or automatically.

  – **Auto**: Set the current time automatically using the time from a digital channel.

  The antenna must be connected in order to set the time automatically.

– **Manual**: Set the current time manually.

Depending on the broadcast station and signal, the auto time set up may not be correct. In this case, set the time manually.

Clock Set: Set the **Day, Month, Year, Hour** and **Minute** manually.

Available only when **Clock Mode** is set to **Manual**.

Time Zone (depending on the country): Select your time zone.

This function is only available when the **Clock Mode** is set to **Auto**.

❑ Using the Sleep Timer

MENU → System → Time → Sleep Timer → ENTER

- Sleep Timer TOOLS: Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).

  To cancel Sleep Timer, select Off.

❑ Setting the On / Off Timer

MENU → System → Time → On Timer <or> Off Timer → ENTER

- **On Timer 1 / On Timer 2 / On Timer 3**: Three different on timer settings can be made. You must set the clock first.



- The displayed image may diifer depending on the model.

- **Setup**: Select **Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun** or **Manual** to set at your convenience. If you select **Manual**, you can set up the day you want to activate the timer.

  The ✓ mark indicates the day you've selected.

- **On Time**: Set the hour and minute.
- **Volume**: Set the desired volume level.
- **Source**: Select **TV** or **USB** content to be played when the TV is turned on automatically. (**USB** can be selected only when a USB device is connected to the TV)
- **Antenna** (when the **Source** is set to **TV**): Select **ATV** or **DTV**.
- **Channel** (when the **Source** is set to **TV**): Select the desired channel.
- **Music / Photo** (when the **Source** is set to **USB**): Select a folder in the USB device containing music or photo files to be played when the TV is turned on automatically.

NOTE

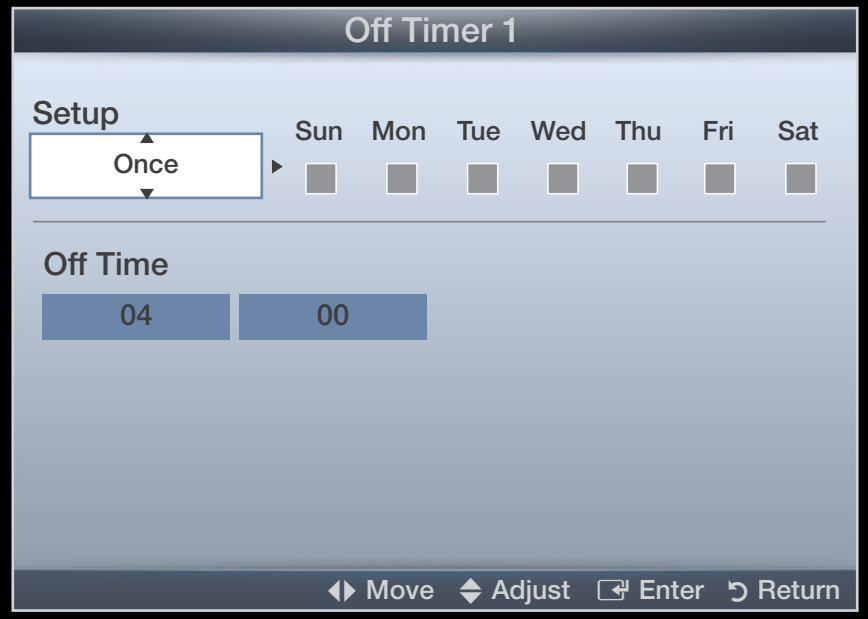
- If there is no music file on the USB device or the folder containing a music file is not selected, the Timer function does not operate correctly.
- When there is only one photo file in the USB device, the Slide Show will not play.
- If a folder name is too long, the folder cannot be selected.
- Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- It is recommended that you use a USB memory stick and a multi card reader when using **On Timer**.
- The **On Timer** function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because these devices take a long time to be recognized.

- **Off Timer 1 / Off Timer 2 / Off Timer 3**: Three different off timer settings can be made. You must set the clock first.

  Setup: Select **Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun** or **Manual** to set at you convenience. If you select **Manual**, you can set up the day you want to activate the timer.

  The ✓ mark indicates the day you've selected.

  Off Time: Set the hour and minute.



- The displayed image may diifer depending on the model.

❑ Locking Programme

MENU → System → Security → ENTER

■ Security

The PIN input screen appears before the setup screen.

Enter your 4-digit PIN, the default of which is “0-0-0-0”. Change the PIN using the **Change PIN** option.

- **Channel Lock (Off / On)**: Lock channels in Channel Manager, to prevent unauthorized users, such as children, from watching unsuitable programme.

- Only available when the Input source is set to **TV**.
- **Program Rating Lock** (depending on the country): Prevent unauthorized users, such as children, from watching unsuitable programme with a user-defined 4-digit PIN code. If the selected channel is locked, the "🔒" symbol will be displayed.
  - **Allow All**: Unlock all TV ratings.
  - The items of **Program Rating Lock** differs depending on the country.
- **Change PIN**: Change your password required to set up the TV.

  If you forget the PIN code, press the remote control buttons in the following sequence in Standby mode, which resets the PIN to "0-0-0-0": **MUTE** → 8 → 2 → 4 → **POWER** (on).

❑ Picture In Picture (PIP)

MENU → System → PIP → ENTER

■ PIP TOOLS

You can watch the TV tuner and one external video source simultaneously. **PIP** (Picture-in-Picture) does not function in the same mode.

NOTE

- For PIP sound, refer to the **Sound Select** instructions.
- If you turn the TV off while watching in **PIP** mode, the PIP window will disappear.
- You may notice that the picture in the PIP window becomes slightly unnatural when you use the main screen to view a game or karaoke.

- PIP settings

Main picture	Sub picture
Component, HDMI/DVI	TV

- **PIP (Off / On)**: Activate or deactivate the PIP function.
- **Channel**: Select the channel for the sub-screen.
- **Size** ( / ): Select a size for the sub-picture.
- **Position** ( /  /  / ): Select a position for the sub-picture.
- **Sound Select (Main / Sub)**: You can choose the desired sound (**Main** / **Sub**) in **PIP** mode.

❑ Economical Solutions

MENU → System → ENTER

❑ Eco Solution

- **Energy Saving (Off / Low / Medium / High / Picture Off)** TOOLS: This adjusts the brightness of the TV in order to reduce power consumption. If you select **Picture Off**, the screen is turned off, but the sound remains on. Press any button except volume button to turn on the screen.
- **Eco Sensor (Off / On)** for LED 5 series 40 inches, and LCD 5 series: To enhance your power savings; the picture settings will automatically adapt to the light in the room.

  If you adjust the **Backlight,** the **Eco Sensor** will be set to **Off**.

  Min Backlight: When **Eco sensor** is **On**, the minimum screen brightness can be adjusted manually.

  If **Eco Sensor** is **On**, the display brightness may change (become slightly darker or brighter) depending on the surrounding light intensity.

- **No-Signal Power Off (Off / 15 min / 30 min / 60 min)**:
  To avoid unnecessary energy consumption, set how long you want the TV to remain on if it's not receiving a signal.
- **Auto Power Off (Off / On)**: The TV will be automatically turned off when no user operation is received for 4 hours.

❑ Other Features

MENU → System → ENTER

■ Language

- **Teletext Language**: Set a desired language for teletext.

  English is the default in cases where the selected language is unavailable in the broadcast.

- **Preference (Primary Audio Language / Secondary Audio Language / Primary Subtitle Language / Secondary Subtitle Language / Primary Teletext Language / Secondary Teletext Language)**: Select a language, which will be the default language when a channel is selected.

Subtitle

Use this menu to set the **Subtitle** mode.

The subtitle feature does not work in Component or HDMI modes.

- **Subtitle (Off / On)**: Switches subtitles on or off.
- **Subtitle Mode (Normal / Hearing Impaired)**: Sets the subtitle mode.
- **Subtitle Language**: Sets the subtitle language.

If the programme you are watching does not support the **Hearing Impaired** function, **Preferred** automatically activates even if the **Hearing Impaired** mode is selected.

English is the default in cases where the selected language is unavailable in the broadcast.

Digital Text (Disable / Enable)

(The option may differ depending on country)

If the programme broadcasts with digital text, this feature is enabled.

Auto Protection Time

- **Auto Protection Time (Off / 2 hours / 4 hours / 8 hours / 10 hours)**: If the screen remains idle with a still image for a certain period of time defined by the user, the screen saver is activated to prevent the formation of ghost images on the screen.

General

- **Game Mode (Off / On)**: When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting game mode.

  NOTE

  - Precautions and limitations for game mode
    - To disconnect the game console and connect another external device, set **Game Mode** to **Off** in the setup menu.
    - If you display the TV menu in **Game Mode**, the screen shakes slightly.
  - **Game Mode** is not available when the input source is set to **TV** or **HDMI/DVI**(connecting a PC).

- After connecting the game console, set **Game Mode** to **On** to prevent poor picture quality.
- If **Game Mode** is **On**:
  - **Picture Mode** is set to **Standard** and **Sound Mode** is set to **Movie**.

- **Menu Transparency (Bright / Dark)**: Set the Transparency of the menu.
- **Boot Logo (Off / On)**: Display Samsung logo when the TV is turned on.

❑ Support Menu

MENU → Support → ENTER

■ e-Manual

You can read the introduction and instructions about the TV features stored in your TV.

For the detailed information about e-Manual Screen, refer to “How to use the e-Manual” in User Manual.

Self Diagnosis

Self Diagnosis might take few seconds, this is part of the normal operation of the TV.

- **Picture Test (Yes / No)**: Use to check for picture problems.

  Yes: If the test picture does not appear or there is noise in the test pattern, select **Yes**. There may be a problem with the TV. Contact Samsung's Call Centre for assistance.

  No: If the test picture is properly displayed, select **No**. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- **Sound Test (Yes / No)**: Use the built-in melody sound to check for sound problems.

  Yes: If you can hear sound only from one speaker or not at all during the sound test, select **Yes**. There may be a problem with the TV. Contact Samsung's Call Centre for assistance.

  No: If you can hear sound from the speakers, select **No**. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- **Signal Information**: (digital channels only) HDTV channel's reception quality is either perfect or the channels are unavailable. Adjust your antenna to increase signal strength.
- **Troubleshooting**: If the TV seems to have a problem, refer to this description.

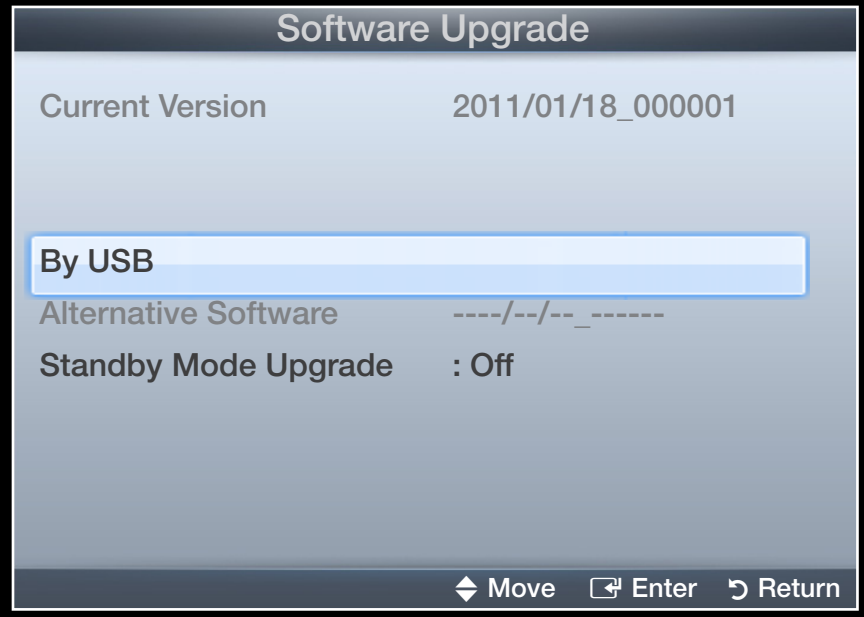
  If none of these troubleshooting tips apply, contact the Samsung customer service centre.

Software Upgrade

Software Upgrade can be performed by downloading the latest firmware from “www.samsung.com,” to a USB memory device.

Current Version the software already installed in the TV.

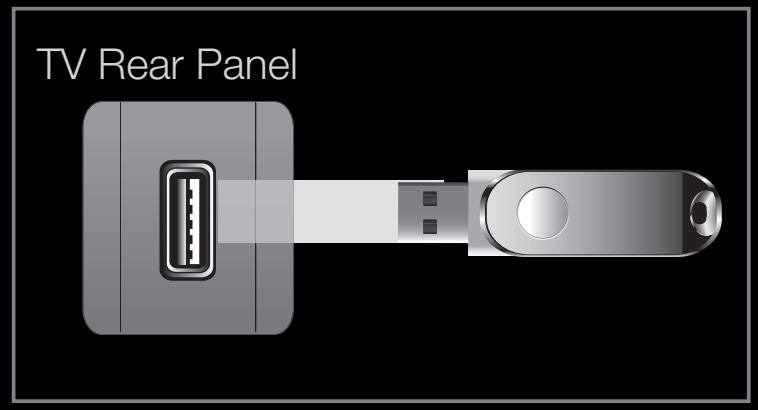
Software is represented as “Year/Month/Day_Version”.



* It may differ depending on the model.

Installing the Latest Version

- **By USB**: Insert a USB drive containing the firmware upgrade file, downloaded from “www.samsung.com,” into the TV. Please be careful not to disconnect the power or remove the USB drive until upgrades are complete. The TV will be turned off and on automatically after completing the firmware upgrade. When software is upgraded, video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.



* It may differ depending on the model.

- **By Channel**: Upgrade the software using the broadcasting signal.

  If the function is selected during the software transmission period, software will be automatically searched and downloaded.

  The time required to download the software is determined by the signal status.

- **Alternative Software** (backup): If there is an issue with the new firmware and it is affecting operation, you can change the software to the previous version.

  If the software was changed, existing software is displayed.

- **Standby Mode Upgrade (Off / 1 hour later / 2 hours later/ 00:00 / 02:00 / 12:00 / 14:00)**: A manual upgrade will be automatically performed at selected time. Since the power of the unit is turned on internally, the screen may be turned on slightly for the product. This phenomenon may continue for more than 1 hour until the software upgrade is complete.

Contact Samsung

View this information when your TV does not work properly or when you want to upgrade the software. You can find information regarding our call centres, and how to download products and software.

Contents Home

You can enjoy useful and various contents.

❑ Using the My Downloads

Enjoy photos, music files saved on a USB Mass Storage Class (MSC) device PC.

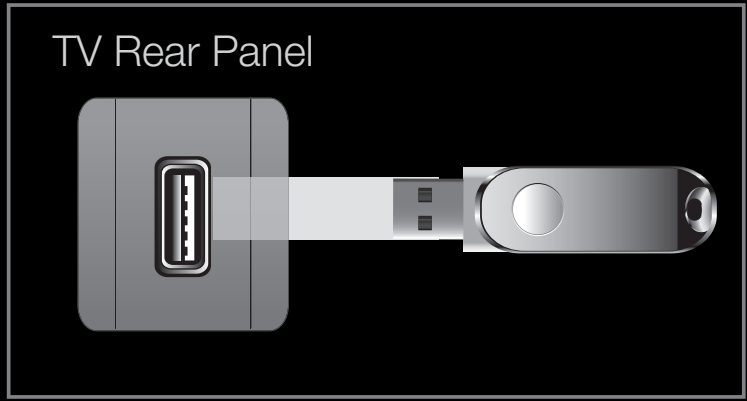
1. Press the **CONTENT** button to select **My Downloads**.
2. Press ▲/▼ button to select desired menu (**Photos**, **Music**), then press the **ENTER** ↵ button.



* It may differ depending on the model.

❑ Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo, music files to the USB jack on the back of the TV.
3. When USB is connected to the TV, popup window appears. Then you can select **New device connected**.



* It may differ depending on the model.

- It might not work properly with unLicenced multimedia files.
- Need-to-Know List before using **My Downloads**.
  - MTP (Media Transfer Protocol) is not supported.
  - The file system supports FAT16, FAT32 and NTFS.
  - Certain types of USB Digital camera may not be compatible with this TV.
  - **My Downloads** only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers and USB HDD (USB HUB are not supported). Devices should be connected directly to the TV's USB port.
  - Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.

- USB (HDD) is not supported.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360X8640 pixels.
- For unsupported or corrupted files, the “Not Supported File Format” message is displayed.
- If the files are sorted by **Folder View**, up to 1000 files can be displayed in each folder.

- MP3 files with DRM that have been downloaded from a non-free site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation, distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.
- If more than 2 PTP devices are connected, you can only use one at a time.
- If more than two MSC devices are connected, some of them may not be recognized. A USB device that requires high power (more than 500mA or 5V) may not be supported.

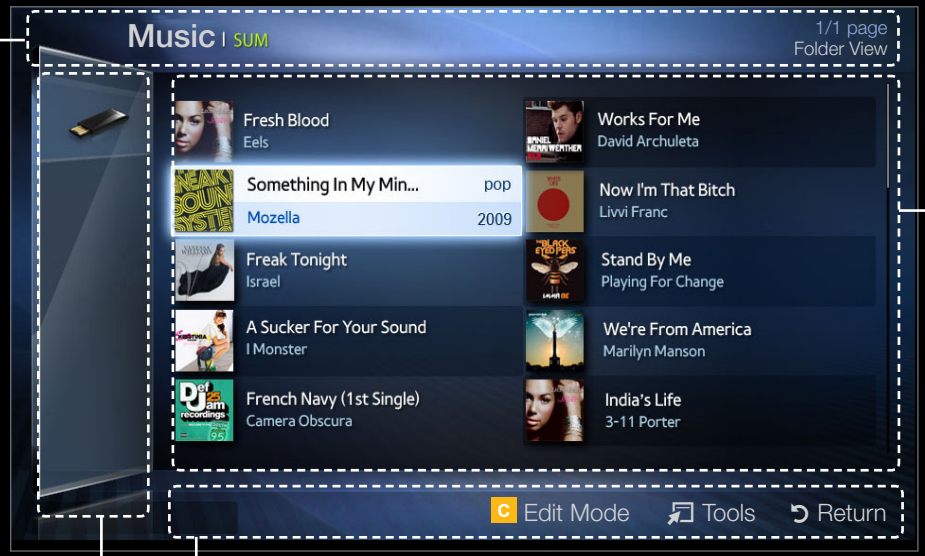
- If an over-power warning message is displayed while you are connecting or using a USB device, the device may not be recognized or may malfunction.
- If the TV has been no input during time set in **Auto Protection Time**, the Screensaver will run.
- The power-saving mode of some external hard disk drives may be released automatically when connected to the TV.

- If a USB extension cable is used, the USB device may not be recognised or the files on the device may not be read.
- If a USB device connected to the TV is not recognised, the list of files on the device is corrupted or a file in the list is not played, connect the USB device to the PC, format the device and check the connection.
- If a file deleted from the PC is still found when **My Downloads** is run, use the “Empty the Recycle Bin” function on the PC to permanently delete the file.
- **My Downloads** only supports sequential jpeg format.

❑ Screen Display

Move to the desired file using the ◄/►/▲/▼ buttons and then press the **ENTER**↵. The file is played. **My Downloads** screen may differ depending on the way to enter the screen.

Information:
You can ascertain the selected device name, contents mode, folder/ file name, page and sorting list.



File List Section:
You can confirm the files and groups that are sorted by category.

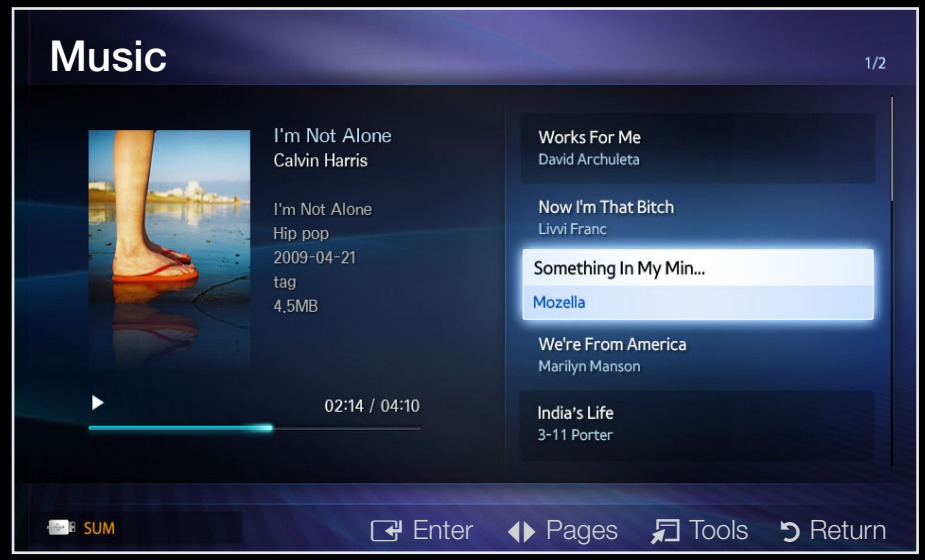
Contents mode / Device name:
You can select the desired Contents mode or Device name.

Operation Buttons:
- C Yellow (**Edit Mode**): Selects the desired music. The check box is shown in the screen to check the music you want. It is only available in Music.
- **Tools**: Displays the option menu.
- **Return**: Move to the previous step.
- **Select**: Select the contents in **Edit Mode**.

Music

Playing Music

1. Press the ◄/►/▲/▼ button to select the desired Music in the file list.
2. Press the **ENTER** ↵ button.



Only displays the files with MP3 file extension. Other file extensions are not displayed, even if they are saved on the same USB device.

If the sound is abnormal when playing MP3 files, adjust the **Equalizer** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)

Playing the selected music

1. Press the C (**Edit Mode**) button.
2. Select the desired music.

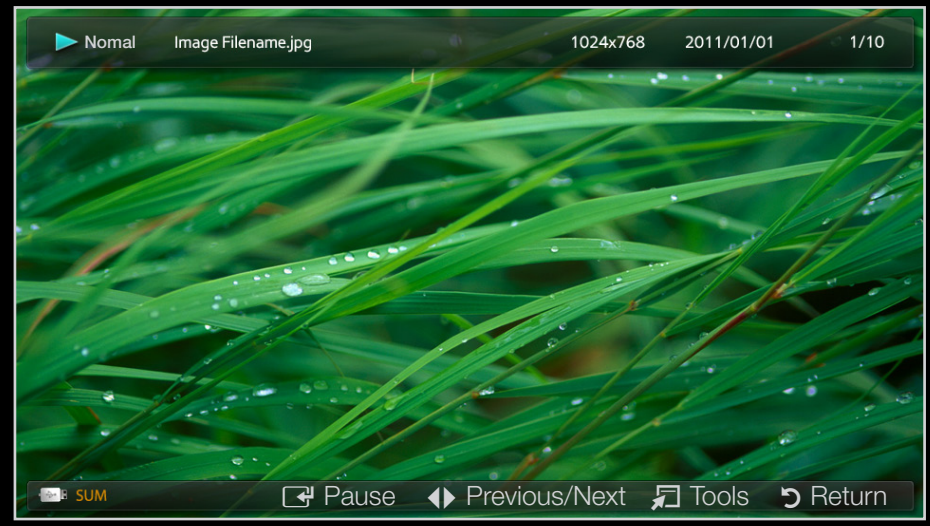
   The check box appears to the left of the selected files.
3. Press the **TOOLS** button and select **Play Selected Contents**.

   You can select or deselect all music by pressing the **Select All/Deselect All**.

Photos

Viewing a Photo (or Slide Show)

1. Press the ◄/►/▲/▼ button to select the desired photo in the file list.
2. Press the **ENTER** button.
   - When a selected photo is displayed, press the **ENTER** button to start the slide show.
   - During the slide show, all files in the file list will be displayed in order.



Music files can be automatically played during the Slide Show if the **Background Music** is set to **On**.

❑ My Downloads - Additional Functions

Music/Photos Play Option menu

During playing a file, press the **TOOLS** button.

Category	Operation	Music	Photos
Shuffle Mode	You can play the music randomly.	✓	
Repeat Mode	You can play music files repeatedly.	✓	
Picture Mode	You can adjust the picture setting.		✓

Category	Operation	Music	Photos
Sound Mode	You can adjust the sound setting.	✓	✓
Start Slide Show / Pause Slide Show	You can start or pause a Slide Show.		✓
Slide Show Speed	You can select the slide show speed during the slide show.		✓
Background Music	You can on/off background music when watching a Slide Show.		✓

Category	Operation	Music	Photos
Background Music Setting	You can select background music when watching a Slide Show.		✓
Zoom	You can zoom into images in full screen mode.		✓
Rotate	You can rotate images in full screen mode.		✓
Information	You can see detailed information about the played file.	✓	✓

❑ Analogue Channel Teletext Feature

The index page of the Teletext service gives you information on how to use the service. For Teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

You can change Teletext pages by pressing the numeric buttons on the remote control.

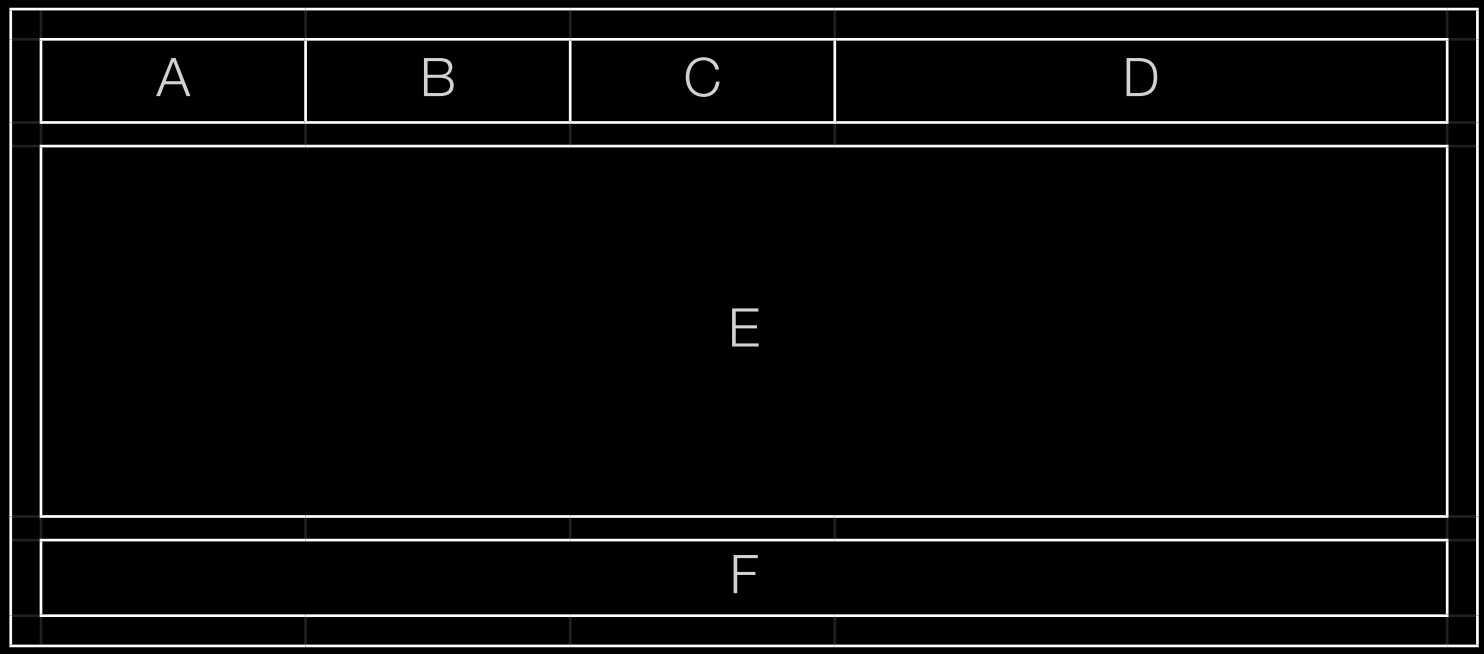
- (mode): Selects the Teletext mode (LIST/ FLOF). If pressed during LIST mode, switches the mode to List save mode. In List save mode, you can save a Teletext page into a list using the 8(store) button.
- / (Teletext on/mix/off): Activates the Teletext mode for the current channel. Press the button twice to overlap the Teletext mode with the current broadcasting screen. Press it one more time to exit teletext.

- (sub-page): Displays the available sub-page.
- (store): Stores the Teletext pages.
- (index): Displays the index (contents) page at any time while you are viewing Teletext.
- (size): Displays the teletext on the upper half of the screen in double-size. To move the text to the lower half of the screen, press it again. For normal display, press it once again.
- (hold): Holds the display at the current page, in the case that there are several secondary pages that follow automaticially. To undo, press it again.
- (page up): Displays the next Teletext page.
- (page down): Displays the previous Teletext page.

- (reveal): Displays the hidden text (answers to quiz games, for example). To display the normal screen, press it again.
- (cancel): Shrinks the Teletext display to overlap with the current broadcast.
- Colour buttons (red, green, yellow, blue): If the FASTEXT system is used by the broadcasting company, the different topics on a Teletext page are colour-coded and can be selected by pressing the coloured buttons. Press the colour corresponding to the topic of your choice. A new colourcoded page is displayed. Items can be selected in the same way. To display the previous or next page, press the corresponding coloured button.

The Teletext pages are organized according to six categories:

Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information. FASTEXT information.

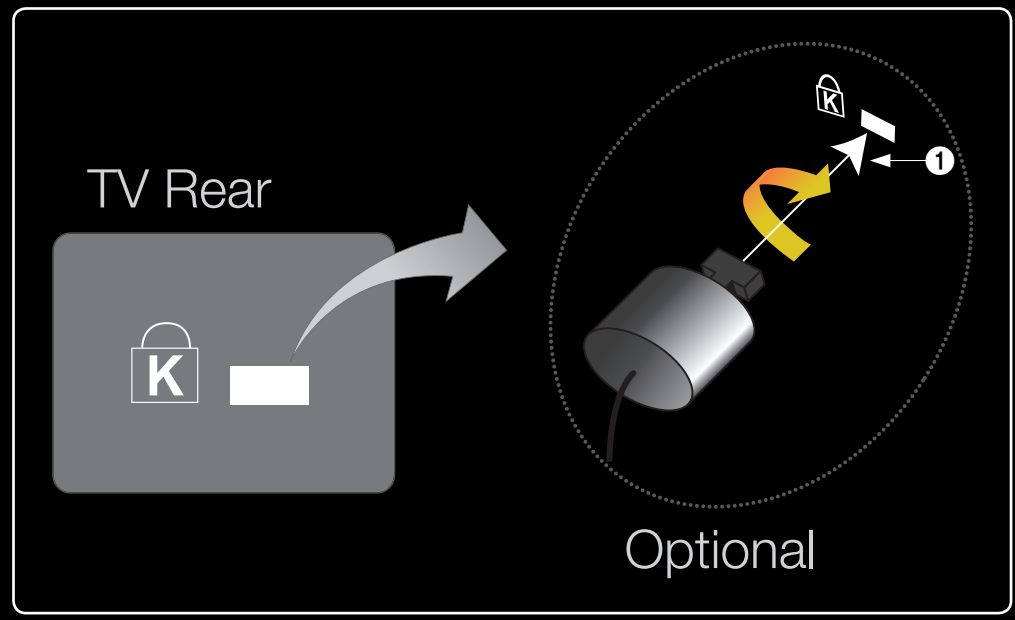


❑ Anti-theft Kensington Lock

(depending on the model)

The Kensington Lock is not supplied by Samsung. It is a device used to physically fix the system when using it in a public place. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for additional information on proper use.

- Please find a "🔒" icon on the rear of the TV. A Kensington slot is beside the "🔒" icon.
- The position and colour may differ depending on the model.



To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
3. Insert the locking device into the Kensington slot on the product (1).
4. Lock the lock.

NOTE

- These are general instructions. For exact instructions, see the User manual supplied with the locking device.
- The locking device has to be purchased separately.
- The location of the Kensington slot may be different depending on the TV model.

❑ Troubleshooting

If you have any questions about the TV, first refer to this list. If none of these troubleshooting tips apply, please visit “www.samsung.com”, then click on Support.

Issues	Solutions and Explanations
Picture Quality	First of all, please perform the **Picture Test** and confirm that your TV is properly displaying test image. (go to **MENU** - **Support** - **Self Diagnosis** - **Picture Test**) If the test image is properly displayed, the poor picture may caused by the source or signal.

Issues	Solutions and Explanations
The TV image does not look as good as it did in the store.	• If you have an analogue cable/set top box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality. • Cable/Satellite subscribers: Try HD stations from the channel line up. • Antenna connection: Try HD stations after performing Auto programme. Many HD channels are up scaled from SD(Standard Definition) contents. • Adjust the Cable/Set top box video output resolution to 1080i or 720p. • Make sure you are watching the TV at the minimum recommended distance based on the size and definition of the signal.

Issues	Solutions and Explanations
The picture is distorted: macroblock error, small block, dots, pixelization	• Compression of video contents may cause picture distortion, especially in fast moving pictures such as sports and action movies. • Low signal level or bad quality can cause picture distortion. This is not a TV issue. • Mobile phones used close to the TV (cca up to 1m) may cause noise in picture on analogue and digital TV.

Issues	Solutions and Explanations
There is poor colour or brightness.	• Adjust the **Picture** options in the TV menu. (go to **Picture Mode** / **Colour / Brightness / Sharpness**) • Adjust **Energy Saving** option in the TV menu. (go to **MENU** - **System - Eco Solution - Energy Saving**) • Try resetting the picture to view the default picture settings. (go to **MENU** - **Picture - Picture Reset**)
There is a dotted line on the edge of the screen.	• If the picture size is set to **Screen Fit**, change it to **16:9**. • Change cable/satellite box resolution.
The picture is black and white.	• If you are using an AV composite input, connect the video cable (yellow) to the Green jack of component input 1 on the TV.

Issues	Solutions and Explanations
When changing channels, the picture freezes or is distorted or delayed.	• If connected with a cable box, please try to reset the cable box. Reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes. • Set the output resolution of the cable box to 1080i or 720p.
Sound Quality	First of all, please perform the **Sound Test** to confirm that your TV audio is properly operating. (go to **MENU** - **Support - Self Diagnosis - Sound Test**) If the audio is **OK**, the sound problem may caused by the source or signal.
There is no sound or the sound is too low at maximum volume.	• Please check the volume the of external device connected to your TV.

Issues	Solutions and Explanations
The picture is good but there is no sound.	• If you are using a DVI to HDMI cable, TV set not support audio. • If your TV has a headphone jack, make sure there is nothing plugged into it.
The speakers are making an inappropriate noise.	• For antenna or cable connections, check the signal strength. Low signal level may cause sound distortion.

Issues	Solutions and Explanations
No Picture, No Video	
The TV will not turn on.	• Make sure the AC power cord is securely plugged in to the wall outlet and the TV. • Make sure the wall outlet is working. • Try pressing the **POWER** button on the TV to make sure the problem is not the remote. If the TV turns on, refer to “The remote control does not work” below.

Issues	Solutions and Explanations
The TV turns off automatically.	• Ensure the **Sleep Timer** is set to **Off** in the **System** menu. • Make sure the AC power cord is plugged in securely to the wall outlet and the TV. • When watching TV from an antenna or cable connection, the TV will turn off after 10 ~ 15 minutes if there is no signal.

Issues	Solutions and Explanations
There is no picture/ video.	• Check cable connections (remove and reconnect all cables connected to the TV and external devices). • Set your external devices' (Cable/Set top Box, DVD, Blu-ray etc) video outputs to match the connections to the TV input. For example, if an external device's output is HDMI, it should be connect to an HDMI input on the TV. • Make sure your connected devices are powered on. • Be sure to select the TV's correct source by pressing the **SOURCE** button on the TV remote. • Reboot the connected device by reconnecting the device's power cable.

Issues	Solutions and Explanations
RF(Cable/Antenna) Connection	
The TV is not receiving all channels.	• Make sure the Antenna cable is connected securely. • Please try **Plug & Play** (Initial setup) to add available channels to the channel list. Go to **MENU** - **System** - **Plug & Play** (Initial setup) and wait for all available channels to be stored. • Verify the Antenna is positioned correctly.

Issues	Solutions and Explanations
The picture is distorted: macro block error small block, dots, pixelization	• Compression of video contents may cause picture distortion. especially on fast moving pictures such as sports and action movies. • A low signal can cause picture distortion. This is not a TV issue.
Others	
The picture will not display in full screen.	• HD channels will have black bars on either side of the screen when displaying up scaled SD (4:3) contents. • Black bars on the top and bottom will appear during movies that have aspect ratios different from your TV. • Adjust the picture size options on your external device or TV to full screen.

Issues	Solutions and Explanations
The remote control does not work.	• Replace the remote control batteries with the poles (+/–) in the right direction. • Clean the sensor's transmission window on the remote. • Try pointing the remote directly at the TV from 5~6 feet away.
The cable/set top box remote control doesn't turn the TV on or off, or adjust the volume.	• Programme the Cable/Set top box remote control to operate the TV. Refer to the Cable/Set user manual for the SAMSUNG TV code.

Issues	Solutions and Explanations
A “**Mode Not Supported**” message appears.	• Check the supported resolution of the TV, and adjust the external device’s output resolution accordingly.
There is a plastic smell from the TV.	• This smell is normal and will dissipate over time.
The TV **Signal Information** is unavailable in the **Self Diagnosis** Test menu.	• This function is only available with digital channels from an Antenna / RF / Coax connection.
TV is tilted to the right or left side.	• Remove the base stand from the TV and reassemble it.
There are difficulties assembling the stand base.	• Make sure the TV is placed on a flat surface. If you can not remove the screws from the TV, please use a magnetized screw driver.

Issues	Solutions and Explanations
The **Channel** menu is grey out (unavailable).	• The **Channel** menu is only available when the TV source is selected.
Your settings are lost after 30 minutes or every time the TV is turned off.	• If the TV is in the **Store Demo** mode, it will reset audio and picture settings every 30 minutes. Change the settings from **Store Demo** mode to **Home Use** mode in the **Plug & Play** (Initial setup) procedure. Press the **SOURCE** button to select **TV** mode, and go to **MENU** → **System** → **Plug & Play** (Initial setup) → **ENTER**↵.
You have intermittent loss of audio or video.	• Check the cable connections and reconnect them. • Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the TV to the wall, we recommend using cables with 90 degree connectors.

Issues	Solutions and Explanations
You see small particles when you look closely at the edge of the frame of the TV.	• This is part of the product's design and is not a defect.
The **PIP** menu is not available.	• **PIP** functionality is only available when you are using a HDMI or Components source.
You turned the TV off 45 minutes ago, and it turned on again.	• It is normal. The TV operates the OTA (Over The Aerial) function itself to upgrade firmware downloaded whilst your watching TV.
There are recurrent picture/sound issues.	• Check and change the signal/source.

Issues	Solutions and Explanations
A reaction may occur between the rubber cushion pads on the base stand and the top finish of some furniture.	• To prevent this, use felt pads on any surface of the TV that comes in direct contact with furniture.

❑ Licence

Manufactured under licence from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

TheaterSound, SRS and ◉ symbol are trademarks of SRS Labs, Inc.

TheaterSound technology is incorporated under licence from SRS Labs, Inc.

Open Source Licence Notice

In the case of using open source software, Open Source Licences are available on the product menu. Open Source Licence Notice is written only English.